DATE: 11/27/96

TO: Arlene Lilly

FROM: Steve Renninger, OSC

SUBJECT: Dayton Electroplate Site

Enclosed changes to the 106 order for the Dayton Electroplate site:

1. Change the order to a 106 Unilateral Order
2. Add threats from action memo (enclosed)
3. Add EPA Cincinnati address as EPA (B-2), 26 W. Martin Luther King Drive, Cincinnati, OH 45268

Please initiate the 106 Order into regional sign-off next week. This memo will serve as my approval. Call me if you have any questions.

Label Info	Line 4	Line 4	Isopro-panol	Sodium Cyanide	Line 3
pH	NA	<1	NA	NA	<1
Cyanide (Total)	6,500 ppm	NA	NA	53,000 ppm	NA
Flashpoint	NA	NA	<74 Deg F	NA	NA

III. THREATS TO PUBLIC HEALTH, WELFARE, OR THE ENVIRONMENT, AND STATUTORY AND REGULATORY AUTHORITIES

The conditions at the Dayton Electroplate site presents an imminent and substantial threat to the public health, or welfare, and the environment and meet the criteria for a removal action as stated in the National Contingency Plan (NCP), Section 300.415, Paragraph (b)(2), specifically:

✓ 1) Actual or potential exposure to nearby populations, animals, or the food chain from hazardous substances or pollutants or contaminants;

During the October 11, 1996 U.S. EPA site investigation, the OSC identified open drums, plating vats, tanks, roll-off boxes containing hazardous wastes. The drums, containers, vats, and tanks contain a vast quantity of highly concentrated caustics, acids, heavy metals, cyanide, and solvents. The plating bath solutions and residues are listed as F007 and F008 hazardous wastes by 40 CFR 261.31. Sampling during the site investigation documented drum and plating vats to contain acids (pH<1), caustics (pH>13), and cyanide (53,000 ppm)

The cyanide and acid solutions are extremely toxic to human and animal life. During the October 11, 1996 U.S. EPA site investigation, the OSC and START identified numerous plating vats that were in a deteriorated state and elevated ambient air monitoring readings near plating area #1. During the August 28, 1996 OEPA investigation, investigators noted an acid vapor collecting near the ceiling of plating area #1. If these solutions were released and mixed inadvertently or intentionally, a toxic cloud of cyanide gas could become airborne a may affect the nearby population.

✓ 2) Hazardous substances or pollutants or contaminants in

drums, barrels, tanks, or other bulk storage containers that may pose a threat of release;

During the October 11, 1996, U.S. EPA site investigation, the OSC observed abandoned drums, tanks, vats, and roll-off boxes containing corrosive and cyanide waste to be open and in varying stages of deterioration. Plating vats were noted to be in poor, rusted condition, many having spilled contents to the surrounding area. U.S. EPA START samples documented drums and vats to contain cyanide (53,000 ppm), caustics (pH>13) and acids (pH=<1).

The uncontrolled and deteriorating nature of approximately 105,000 gallons of plating solutions including 250 drums of hazardous waste poses a real threat of release. If a major release were to occur, waste acid may come in contact with incompatible materials such as the cyanide-bearing electroplating solutions and raw sodium cyanide product material contained in vats and drums. Should a release of acid occur and react with a cyanide source, toxic hydrogen cyanide gas could be generated and emitted. If such an event occurs, contaminants could become airborne and may affect the nearby population.

✓ 3) Weather conditons that may cause hazardous substances or pollutants or contaminants to migrate or be released;

During the October 11, 1996 U.S. EPA site investigation, the OSC observed deteriorated drums and containers located within the abandoned site buildings. The drums and containers will be exposed to varying seasonal temperatures (freeze/thaw) which over time could promote further deterioration and ultimate failure and release.

✓ 4) Threat of Fire and/or Explosion;

During the October 11, 1996 U.S. EPA site investigation, the OSC observed a flammable storage area in building #2 with containers which have been documented to contain ignitable waste. Label information from flammable storage area drums and containers to contain isopropanol. Waste samples obtained during the site investigation revealed a flashpoint of 74 degrees F. Therefore, the potential for a fire/explosion exists and, if such an event occurs, contaminants could become airborne and affect off-site locations.

IV. ENDANGERMENT DETERMINATION

Given the site conditions, the nature of the suspected hazardous